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fucose donor moiety to the acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern.

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31. (Amended) A method of producing a recombinant glycopeptide having a fucosylation pattern that is substantially identical to a fucosylated glycopeptide having a known fucosylation pattern, said method comprising:

- (a) contacting the recombinant glycopeptide with a reaction mixture that comprises a fucose donor moiety and the fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to a fucose acceptor moiety on said recombinant glycopeptide, thereby producing a fucosylated recombinant glycopeptide, wherein said fucosyltransferase lacks a membrane anchoring domain; and
 - (b) terminating the transfer of the fucose to the fucose acceptor when the fucosylation pattern substantially identical to the known fucosylation pattern is obtained.
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56. (New) A method for modifying the glycosylation pattern of a glycopeptide comprising a first acceptor moiety for a first fucosyltransferase and a second acceptor moiety for a second fucosyltransferase, said method comprising:

- (a) contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the first fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the first acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern, and
- (b) contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the second fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the second acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern.

57. (New) A method for modifying the glycosylation pattern of a glycopeptide comprising a first acceptor moiety for a first fucosyltransferase and a second acceptor moiety for a second fucosyltransferase, wherein the glycopeptide is contacted with the first fucosyltransferase and the second fucosyltransferase simultaneously, said method comprising:

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- (a) contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the first fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the first acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern, and
 - (b) contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the second fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the second acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern.

58. (New) A method for modifying the glycosylation pattern of a glycopeptide comprising a first acceptor moiety for a first fucosyltransferase and a second acceptor moiety for a second fucosyltransferase, wherein the glycopeptide is contacted with the first fucosyltransferase and the second fucosyltransferase sequentially without isolation of product resulting from contacting with the first fucosyltransferase, said method comprising:

- (a) contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the first fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the first acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern, and
- (b) contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the second fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the second acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern.

59. (New) A method for modifying the glycosylation pattern of a glycopeptide comprising an acceptor moiety for a first fucosyltransferase, wherein the first fucosyltransferase is a member selected from FucT-IV, FucT-VI, FucT-VII and combinations thereof, said method comprising:

contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the first fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern.

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60. (New) A method for modifying the glycosylation pattern of a glycopeptide comprising a first acceptor moiety for a first fucosyltransferase and a second acceptor moiety for a second fucosyltransferase, wherein the second fucosyltransferase is a member selected from FucT-IV, FucT-VI, FucT-VII and combinations thereof, said method comprising:

- (a) contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the first fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the first acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern, and
- (b) contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the second fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the second acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern.

61. (New) A method for modifying the glycosylation pattern of a glycopeptide comprising an acceptor moiety for a first fucosyltransferase, wherein the first fucosyltransferase is recombinantly produced, said method comprising:

contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the first fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern.

62. (New) The method according to claim 61, wherein said first fucosyltransferase lacks a membrane anchoring domain.

63. (New) A method for modifying the glycosylation pattern of a glycopeptide comprising an acceptor moiety for a first fucosyltransferase wherein the glycopeptide is an IgG chimera, said method comprising:

contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the first fucosyltransferase under appropriate conditions to transfer fucose from the

64. fucose donor moiety to the acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern.

64. (New) A method for modifying the glycosylation pattern of a glycopeptide comprising an acceptor moiety for a first fucosyltransferase, said method comprising:

- (a) contacting said glycoprotein with a glycosyltransferase other than a fucosyltransferase and a donor moiety other than a fucose donor moiety, thereby glycosylating the glycoprotein with a glycosyl moiety other than a fucose unit, and
- (b) contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the first fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern.

65. (New) A method for modifying the glycosylation pattern of a glycopeptide comprising an acceptor moiety for a first fucosyltransferase, said method comprising:

- (a) contacting said glycoprotein with a glycosyltransferase other than a fucosyltransferase and a donor moiety other than a fucose donor moiety, thereby glycosylating the glycoprotein with a glycosyl moiety other than a fucose unit, wherein the glycosyltransferase is a member selected from the group consisting of galactosyltransferase, sialyltransferase and combinations thereof, and
- (b) contacting the glycopeptide with a reaction mixture that comprises a fucose donor moiety and the first fucosyltransferase under appropriate conditions to transfer fucose from the fucose donor moiety to the acceptor moiety, such that the glycopeptide has a substantially uniform fucosylation pattern.

REMARKS

Status of the Claims

Applicants originally presented claims 1-55 for examination. In a Restriction Requirement on June 4, 2002, the Examiner divided the claims into two groups. Applicants elected the claims of Group I (claims 1-21, 31-55) with traverse for prosecution in the present application. Claims 1-21, 31-65 are currently under examination. The Examiner has indicated